

December 2022 Neonates

- Risk Management Importance
 - EM physicians are the defendant in 6% of pediatric medical claims
 - Neonates have the highest medical payouts of all pediatric malpractice cases with a mean of \$936k
 - Neonatal risk lasts many years
 - 3.7% of all pediatric cases are filed more than 10 years after the injury
 - Most common neonatal medical complaints
 - 63% injuries from labor and delivery
 - Example: brachial plexus injury from shoulder dystocia
 - 14% failure to diagnose, delay in diagnosing, wrong diagnosis
 - 13% medical treatment errors, 4% surgical errors
 - [Study of Malpractice Claims Involving Children | The Doctors Company](#)
- Neonatal resuscitation notes from the neonatal resuscitation program
- Airway
 - Place head in “sniffing” position. Suction mouth and nose
- Breathing
 - If apneic, gasping, or HR <100, give PPV at 40-60 breaths/min
 - Bag Valve Mask- Size 0 for preterm, size 1 for term
 - Listen for rising heart rate for the first 15 seconds of PPV
 - If HR not rising and chest not moving with PPV, do MRSOPA until chest moves with PPV for 30 seconds
 - MRSOPA: Mask Adjustment, Reposition Airway, Suction mouth and nose, Open mouth, Pressure increase, Alternative Airway
 - Attach pulse oximeter, consider cardiac monitor
 - Intubate or place laryngeal mask and give PPV for 30 seconds prior to starting compressions
 - Use CO2 detector after intubation or insertion of laryngeal mask
 - Intubate with miller size 0 (preterm infant) or size 1 laryngoscope (term)

Birth Weight (kg)	Gestational Age (weeks)	ET Tube size (mm) internal diameter	Insertion depth
< 1	< 28	2.5	6 – 7 cm
1 – 2	28 – 34	3.0	7 – 8 cm
2 – 3	34 – 38	3.5	8 – 9 cm
> 3	> 38	3.5 – 4.0	9 – 10 cm

- Circulation
 - Start compressions if HR is less than 30 seconds of PPV with chest movement. Check HR every 60 seconds
 - Cardiac monitor is preferred method for assessing HR during CPR
 - Give 3 compressions to 1 breath every 2 seconds. Use 100% oxygen
 - Compress one third of the anterior-posterior diameter of the chest
- Drugs
 - Give epinephrine if HR <60 bpm after 60 seconds of CPR
- Below is a great video resource from the neonatal resuscitation program with many procedure videos
 - [NRP Skills Videos \(aap.org\)](#)

Quality Committee Notes

- Calling a Code Sepsis is as important as calling a Code Stroke as it expedites care.
- Remember to talk in a professional manner when at the nursing station. Patients can hear more than we think.
- Inpatient pharmacy has Xofluza available. This is a one time dose tamiflu alternative for persons 5 years and older

December 2022 Study Sheet

- [Ketamine for Management of Neonatal and Pediatric Refractory Status Epilepticus | Neurology](#)
 - Ketamine was successful in seizure reduction or termination in 74% of patients with status epilepticus
- [Serious Bacterial Infections in Young Febrile Infants With Positive Urinalysis Results | Pediatrics | American Academy of Pediatrics \(aap.org\)](#)
 - No cases of meningitis or bacteremia in non critical infants 29-60 days with a positive UA. No need for LP
- [Sodium Bicarbonate Use During Pediatric Cardiopulmonary Resuscitation: A Secondary Analysis of the ICU-RESUSCitation Project Trial - PubMed \(nih.gov\)](#)
 - Bicarb use in out of hospital pediatric cardiac arrest was associated with lower rates of survival to hospital discharge
- [Calcium Administration During Cardiopulmonary Resuscitation for In-Hospital Cardiac Arrest in Children With Heart Disease Is Associated With Worse Survival-A Report From the American Heart Association's Get With The Guidelines-Resuscitation \(GWTG-R\) Registry - PubMed \(nih.gov\)](#)
 - IV calcium given for in hospital cardiac arrest was associated with lower rates of survival to hospital discharge
- [A systematic review of the effectiveness and safety of droperidol for pediatric agitation in acute care settings - PubMed \(nih.gov\)](#)
 - Droperidol is safe for pediatric agitation
- [Nasal High-Flow Therapy during Neonatal Endotracheal Intubation | NEJM](#)
 - High flow oxygen via nasal cannula improved first pass success in neonates